

SUMMARY

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INTRODUCTION

The Louisiana Department of Transportation and Development (DOTD), in cooperation with the Federal Highway Administration (FHWA), is proposing to construct a four-lane fully controlled access highway on new location, designed to interstate standards. The proposed highway is approximately 56 kilometers (35 miles) in length and generally parallels the existing U.S. 71 highway. The project is known as the North-South Expressway, extending from Interstate 220 in Shreveport north to the Arkansas state line. The project study area lies entirely within Caddo Parish, Louisiana and includes or is in close proximity to the communities of Shreveport, Blanchard, Mooringsport, Dixie, Oil City, Belcher, Gilliam, Vivian, Hosston, Mira, Rodessa and Ida.

The North-South Expressway project forms the most southerly segment of a congressionally designated High Priority Corridor (HPC) running from Shreveport, Louisiana to Kansas City, Missouri (Exhibit S-1). Congress identified twenty-one transportation corridors as nationally important in 1991. These corridors are intended to complement the existing Interstate system, integrate regions of the country, improve safety and efficiency of travel and commerce, and promote economic development.

The current study of alternatives and the environmental consequences of the proposed action was initiated by DOTD and FHWA in 1997. This study is fully documented in the remaining sections of this environmental impact statement.

ALTERNATIVES CONSIDERED AND THE SELECTED ALIGNMENT

The development of alternatives for the North-South Expressway followed a multi-step approach in order to screen possible highway locations against increasingly more detailed environmental information. This information was gathered for an area approximately 56 kilometers (35 miles) in length bounded on the north by the Arkansas state line and on the south by Interstate 220 between U.S. 71 and LA 173. The study area varied in width from 3 kilometers (2 miles) at the southern end to a maximum of 16 kilometers (10 miles) at the northern end and was generally bounded on the west by LA 173, LA 538 and by LA 1 north of Mooringsport. On the east, the study area was bounded by U.S. 71, except for an area east of Gilliam, Hosston, and Ida. The compilation and mapping of sensitive environmental resources resulted in a constraint map used for the refinement of several previously developed *corridors* approximately 600 meters (2,000 feet) wide. These corridors were analyzed and screened against the sensitive resources, and

scrutinized by the public, local officials and resource agencies. This process provided sufficient information to identify a Preferred Corridor, which was advanced to detailed study.

By updating and refining the environmental data contained in the corridor study resource inventory, detailed *alignments* were developed within the Preferred Corridor that would first avoid, then minimize impact to sensitive resources, including residential areas. Three alignments were developed with an average width of 100 meters (300 feet).

Additional studies were conducted at the project's southern terminus in order to evaluate a concept outlined in the Shreveport Metropolitan Planning Commission's North Shreveport Regional Development Plan that would connect the North-South Expressway to I-220 at the U.S. 71/North Market Street interchange. This study resulted in an additional alignment, outside of the Preferred Corridor, which was fully evaluated in this environmental impact statement.

An integrated, comprehensive public involvement program was conducted for this project. This program included the public, local officials and appropriate resource agencies. The alignment development phase was particularly rigorous in its consideration of comments from these involved parties. As a result of this program, sufficient information and public opinion was available to identify a Preferred Alignment in the Draft Environmental Impact Statement (DEIS) for the proposed highway. After a thorough consideration of comments received on the DEIS, a Selected Alignment was identified and is shown in Exhibit S-2.

A No-Action alternative was retained throughout the study as a basis for comparing the relative benefits and impacts of the alternatives. Under this alternative, the only projects undertaken would be currently planned safety and capacity improvement projects in the study area. Safety projects generally involve shoulder widening and curve realignment where necessary. The four-lane widening of LA 1 from U.S. 71 to the Texas state line would be completed for this alternative.



Safety improvements in the area would be implemented regardless of the decision to construct the proposed highway. Depending on the timing of construction of the proposed highway, it may be necessary to widen segments of U.S. 71, LA 2, LA 3, LA 173 and LA 538 to serve local capacity demands.

Public hearings were held on August 30 and 31, 1999 in Shreveport and Hosston, Louisiana, respectively. Public comments received on the DEIS are discussed in Section 7. In addition, over fifty DEISs were distributed to the state and federal agencies and organizations listed in Section 6. Three comments were received from this group and are discussed in Section 7. Comments received were considered in the identification of the Selected Alignment.

SUMMARY OF BENEFICIAL AND ADVERSE IMPACTS

Construction of the proposed highway would:

- ❑ Complete a critical link in the Interstate system
- ❑ Facilitate local, regional and national economic growth
- ❑ Provide sufficient capacity for the growing population of the study area
- ❑ Improve traffic safety and emergency response times
- ❑ Improve the connectivity of existing rail, bus, air and water transportation modes

- ❑ Improve access to medical facilities, other social services, and recreational attractions in the study area
- ❑ Improve efficiency of transportation for the trucking industries and businesses and facilities dependent on trucking
- ❑ Provide a trade corridor in support of NAFTA.

Impacts to the social, economic, natural, and cultural environment would result from construction of any of the alignments evaluated in detail in this document. A summary of these impacts is presented in Table S-1. The shaded information in Table S-1 represents the Selected Alignment. The Selected Alignment is a composite of segments from each of the alignments, where the selected segment has distinct advantages in that particular area.

The basis for identification of the Selected Alignment in each segment is discussed in detail in Section 2. The Selected Alignment meets the project purpose and need, has the least amount of wetland impacts and minimizes wetland impacts to the greatest extent practicable in accordance with the Section 404 b(1) Guidelines. The Selected Alignment minimizes impacts overall and has a moderate estimated construction cost. The Selected Alignment best balances the benefits expected from the project with the overall impacts.

OTHER MAJOR FEDERAL ACTIONS IN THE AREA

The proposed highway crosses Twelvemile Bayou. Twelvemile Bayou is included in the Shreveport to Daingerfield navigation reach of the Red River Waterway Project, a federally authorized U.S. Army Corps of Engineers project. The project is currently in a deferred status.

The U.S. Army Corps of Engineers is also conducting a study to determine the feasibility of making the Red River navigable from Shreveport, Louisiana to Index, Arkansas.

The Red River Alluvial Plain in Louisiana and Arkansas is currently being evaluated by the U.S. Fish and Wildlife Service for the possible establishment of a multiple-unit National Wildlife Refuge. Specific sites for potential acquisition have not yet been determined.

LA 1 is being widened to four lanes from U.S. 71 to LA 538 north of Oil City. FHWA is the lead federal agency for this action. Phased construction is on-going.

OTHER FEDERAL ACTIONS AND PERMITS REQUIRED

The following actions must occur in order to implement this project:

1. The issuance of a Section 404 permit by the U.S. Army Corps of Engineers for the placement of dredged and fill material in

- waters of the United States and a related Section 401 Water Quality issued by the Louisiana Department of Environmental Quality. A draft application for this permit is included in this document. The permit application will be finalized and processed after the Record of Decision has been issued.
2. Coordination of the Section 106 process for consideration of historic resources to be handled by the Louisiana Department of Culture, Recreation and Tourism, Division of Archaeology and the Advisory Council on Historic Preservation
 3. A National Pollutant Discharge Elimination System (NPDES) Permit as required by Section 402 of the Clean Water Act, issued by the Louisiana Department of Environmental Quality.
 4. A Louisiana Water Discharge Permit System (LWDPS) Permit issued by the Louisiana Department of Environmental Quality.
 5. A U.S. Coast Guard Navigation Permit is not anticipated for the Twelvemile Bayou crossing at this time. Currently, this portion of the U.S. Army Corps of Engineers' Red River Waterway Project is in a deferred status.

Table S-1
IMPACT SUMMARY

Section	Alignment	Length	Construction Cost	Right of Way Cost	Structures				Cemeteries	Total Noise Impacts	Paul Lynch Park Area	Natural Resources						Cultural Resources			Potential Hazardous Waste Sites	Active Water Wells
					Residence	Mobile Homes	Business	Church				Wetlands		Floodplains	Active Oil and Gas Wells	Farmlands		Recorded Archaeology Sites	Recorded Historic Structures	High Probability Area		
		km (miles)										(in 000s)	(in 000s)			#	ha (ac)			ha (ac)		
1	Line 1	21.2 (13.2)	\$ 187,880	\$ 11,680	31	5	1	3	-	99	-	7	39.8 (98.4)	180.8 (446.7)		1	108.2 (267.2)			94.2 (232.8)	-	-
	Line 2	21.1 (13.1)	\$ 186,710	\$ 12,960	42	2	3	3	-	118	2.0 (4.9)	7	43.3 (107.1)	184.5 (456.0)	1	109.4 (270.2)	82.3 (203.5)	-	-	272.1 (672.2)	3	1
	Line 3	21.3 (13.2)	\$ 187,760	\$ 13,560	47	2	3	3	-	107	1.1 (2.6)	7	42.7 (105.6)	179.0 (442.4)	1	108.6 (268.2)	81.2 (200.6)	-	-	272.1 (672.2)	3	1
	Line 4	19.9 (12.4)	\$ 229,410	\$ 10,810	6	14	19	1	-	51	15.1 (37.3)	9	46.7 (115.4)	154.0 (380.7)	1	144.6 (357.2)	75.7 (187.2)	-	-	240.8 (595.0)	2	1
	Selected	21.2 (13.1)	\$ 187,290	\$ 11,570	31	5	1	3	-	99	-	7	39.8 (98.4)	180.7 (446.7)	1	108.5 (267.9)	94.1 (232.6)	-	-	278.2 (687.5)	2	1
2	Line 1	21.9 (13.6)	\$ 158,140	\$ 30,030	4	2	-	-	-	33	-	5	14.6 (36.0)	42.3 (104.5)	64	147.9 (365.5)	47.8 (118.1)	-	-	139.2 (344.0)	2	1
	Line 2	22.1 (13.7)	\$ 157,200	\$ 19,310	1	1	-	-	-	5	-	4	14.6 (36.1)	33.8 (83.6)	35	159.9 (395.1)	33.4 (82.4)	-	-	159.1 (393.2)	-	1
	Line 3	21.6 (13.4)	\$ 144,090	\$ 31,990	3	-	-	-	-	31	-	5	14.1 (34.9)	45.0 (111.2)	70	116.4 (287.6)	71.4 (176.4)	3	-	146.4 (361.8)	2	2
	Line 4	22.1 (13.7)	\$ 144,790	\$ 19,760	2	-	-	-	-	12	-	4	14.6 (36.0)	33.7 (83.3)	36	159.3 (393.6)	33.4 (82.4)	-	-	158.6 (391.9)	-	1
	DEIS Preferred	22.1 (13.7)	\$ 144,790	\$ 19,760	2	-	-	-	-	12	-	4	14.6 (36.0)	33.7 (83.3)	36	159.3 (393.6)	33.4 (82.4)	-	-	158.6 (391.9)	-	1
	Selected	22.1 (13.7)	\$ 144,790	\$ 19,760	2	-	-	-	-	12	-	4	13.6 (33.6)	32.9 (81.3)	36	159.5 (394.1)	33.3 (82.3)	-	-	158.8 (392.4)	-	1
3	Line 1	13.7 (8.5)	\$ 80,550	\$ 6,680	4	-	-	-	-	6	-	3	2.0 (5.1)	3.2 (7.9)	6	30.0 (74.0)	20.2 (49.8)	-	-	37.1 (91.7)	2	1
	Line 2	15.0 (9.3)	\$ 89,580	\$ 5,870	3	1	-	-	-	1	-	2	2.2 (5.3)	2.3 (5.6)	3	34.4 (84.9)	10.4 (25.6)	-	-	50.1 (123.8)	2	1
	Line 3	13.8 (8.6)	\$ 81,040	\$ 5,160	3	-	-	-	-	3	-	2	1.3 (3.3)	3.0 (7.4)	2	28.5 (70.3)	28.9 (71.3)	-	-	37.5 (92.7)	3	1
	Line 4	14.9 (9.3)	\$ 84,380	\$ 5,560	4	-	-	-	-	3	-	2	1.1 (2.6)	3.9 (9.7)	3	32.7 (80.9)	10.3 (25.5)	-	-	52.2 (129.0)	2	1
	Selected	14.9 (9.3)	\$ 84,380	\$ 5,560	4	-	-	-	-	3	-	2	1.1 (2.6)	3.9 (9.7)	3	32.7 (80.9)	10.4 (25.5)	-	-	52.2 (129.0)	2	1
TOTAL:	No-Action	-	\$ -	\$ -	-	-	-	-	-	45	-	-	-	-	-	-	-	-	-	-	-	-
	Line 1	56.8 (35.3)	\$ 426,570	\$ 48,390	39	7	1	3	-	138	-	15	56.4 (139.5)	226.3 (559.1)	71	286.1 (706.7)	162.2 (400.7)	-	-	454.3 (1122.6)	6	3
	Line 2	58.3 (36.2)	\$ 433,490	\$ 38,140	46	4	3	3	-	124	2.0 (4.9)	13	60.1 (148.5)	220.6 (545.2)	39	303.7 (750.2)	126.1 (311.5)	-	-	481.3 (1189.3)	5	3
	Line 3	56.7 (35.2)	\$ 412,890	\$ 50,710	53	2	3	3	-	141	1.1 (2.6)	14	58.1 (143.8)	227.0 (561.0)	73	253.5 (626.1)	181.5 (448.3)	3	-	456.0 (1126.7)	8	4
	Line 4	56.9 (35.3)	\$ 458,580	\$ 36,130	12	14	19	1	-	66	15.1 (37.3)	15	62.4 (154.0)	191.6 (473.7)	40	336.6 (831.7)	119.4 (295.1)	-	-	451.6 (1115.9)	4	3
	DEIS Preferred	58.2 (36.1)	\$ 416,460	\$ 36,890	37	5	1	3	-	114	-	13	55.5 (154.0)	218.3 (539.7)	40	300.5 (831.7)	137.9 (295.1)	-	-	489.0 (1208.4)	4	3
	Selected	58.2 (36.1)	\$ 416,460	\$ 36,890	37	5	1	3	-	114	-	13	54.5 (137.0)	217.5 (537.7)	40	300.7 (742.9)	137.8 (340.4)	-	-	489.2 (1208.9)	4	3

Source: Michael Baker Jr., Inc.

ENVIRONMENTAL COMMITMENTS

Throughout this project, the DOTD and FHWA have consulted and coordinated with several state and federal agencies, as well as the public, regarding important issues. Many issues have been resolved throughout the course of the preparation of the Draft and Final EISs. The resolution of other issues cannot be completed until the project moves forward into the next phase of design, when additional information becomes available. These issues have been resolved by agreeing to the manner in which they will be addressed at a later date. The following list summarizes the agreements and commitments that have been reached for this project.

- ❑ The FHWA, DOTD and the Louisiana State Historic Preservation Officer have reached a consensus for the completion of the Section 106 process with respect to the Project's effect on cultural resources. The agency correspondence is included in the Appendix.
- ❑ The DOTD will attempt to further minimize wetland impacts in the final design phase of the project when practicable. All unavoidable wetland impacts will be mitigated for by the DOTD. Mitigation ratios and concepts for the filling of wetlands have been discussed with the Corps of Engineers (COE) in conjunction with the Section 404 permit process. Final mitigation ratios and requirements will be

determined after issuance of the Record of Decision per current COE policy.

- ❑ The DOTD will provide relocation assistance to residences and businesses displaced during acquisition of right-of-way in accordance with the Federal Uniform Relocation Assistance and Real Property Policies Act of 1970. The DOTD is committed to locating replacement housing within the occupant's financial means and within the general area of the project and when necessary providing housing of last resort. Real estate availability will be reassessed once final design of the highway has been completed. The DOTD publication, "Acquisition of Right of Way and Relocation Assistance" is included in the Appendix for further information.
- ❑ The DOTD will minimize water quality impacts and will comply with all requirements of the Clean Water Act, as amended, for the construction of this proposed highway, and will include all specifications and best management practices (BMPs) necessary for control of erosion and sedimentation due to construction related activities.
- ❑ The DOTD and its contractors will not excavate, fill, or perform land clearing activities within Waters of the United States or any areas under jurisdiction of the COE, except as authorized by the COE. To ensure that all borrow and waste activities occur on high

ground, except as authorized by permit, the DOTD shall require its contractors to identify all areas to be used as borrow material, or to dispose of dredged, fill, or waste material. Documentation of the location and characteristics of all borrow and disposal sites associated with the project will be available for COE review upon request.

- ☐ The DOTD will coordinate with Caddo Parish and other local government entities to insure that highway drainage has been adequately addressed during final design of the highway.
- ☐ Following issuance of the Record of Decision (ROD), the DOTD will hold Design Public Hearings to receive public comments on the final design of the highway.